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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/716,998	11/19/2003	Regis J. Crinon	MSI-1733US	7597
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LEE & HAYES PLLC 421 W RIVERSIDE AVENUE SUITE 500 SPOKANE, WA 99201				
			EXAMINER IDOWU, OLUGBENGA O	
			ART UNIT 2623	PAPER NUMBER
			MAIL DATE 10/01/2007	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

10/716,998

Applicant(s)

CRINON ET AL.

Examiner

Olugbenga O. Idowu

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-26 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11/19/2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_.

### DETAILED ACTION

1. This office action is in response to application number: 10/716998 filed on 11/19/2003. Claims 1 – 26 have been examined and are pending.

#### ***Claim Rejections - 35 USC § 101***

2. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 1- 13 rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Claims 1 – 11 are drawn to functional descriptive material in that a computer readable media comprising computer executable instructions. Normally, the claim would be statutory. However, the specification, at [0055 - 0056] defines the claimed computer readable media as encompassing statutory media such as a "RAM", "ROM", "EEPROM", etc, as well as *non-statutory* subject matter such as a "modulated data signal such as a carrier wave or other transport mechanism and includes any information delivery.

A "signal" embodying functional descriptive material is neither a process nor a product (i.e., a tangible "thing") and therefore does not fall within one of the four statutory classes of § 101. Rather, "signal" is a form of energy, in the absence of any physical structure or tangible material.

Because the full scope of the claim as properly read in light of the disclosure encompasses non-statutory subject matter, the claim as a whole is non-statutory. The examiner suggests amending the claim to include the disclosed tangible computer

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readable media, while at the same time excluding the intangible media such as signals, carrier waves, etc defined in the specification. Any amendment to the claim should be commensurate with its corresponding disclosure.

Claims 12 and 13 recites a computer readable media containing data structures (program attributes and attribute values) which does not impart functionality to a computer or computing device, and is thus considered nonfunctional descriptive material. Such nonfunctional descriptive material, in the absence of a functional interrelationship with a computer, does not constitute a statutory process, machine, manufacture or composition of matter and is thus non-statutory per se.

Nonfunctional descriptive material that does not constitute a statutory process, machine, manufacture or composition of matter and should be rejected under 35 U.S.C. Sec. 101.

Certain types of descriptive material, such as music, literature, art, photographs and mere arrangements or compilations of facts or data, without any functional interrelationship is not a process, machine, manufacture or composition of matter.

### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States

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only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1-4, 9-10, 14-17, 20 and 22 are rejected under 35 U.S.C. 102(e) as being anticipated by Bokor, publication number: US 2004.0015998 B1.

As per claims 1, 20 and 22, Bokor teaches a processor-readable medium having processor-executable instructions that, when executed by a processor, performs a method comprising:

receiving a digital television (DTV) application and its associated metadata (receiving television application and related information, [0032], lines 9 - 12);

generating a data grouping having application signaling information, wherein the information is based upon the metadata associated with the DTV application (application being pre-coded with triggers, [0027], program information(metadata) containing options to display commercials, [0038], lines 1 - 4, data grouping being referred to as the combination of the application, commercials and commercial triggers, [0024, 0027]);

sending a transmission to a DTV receiving unit, wherein such transmission comprises the data grouping (sending application to STB, [0025], lines 1 - 6).

As per claim 2, Bokor teaches a medium as recited in claim 1, wherein the method further comprises storing the DTV application and its associated metadata (storing the application, [0025], lines 9 -11).

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As per claim 3, Bokor teaches a medium as recited in claim 1, wherein the method further comprises constructing and formatting a DTV data service transmission which comprises the DTV application (orchestrating delivery of services, [0022], lines 6 - 16).

As per claims 4 and 17, Bokor teaches wherein the method further comprises generating a content referencing identifier for the DTV application (applications being on a carousel, [0025], lines 6 - 10).

As per claim 9, Bokor teaches a processor-readable medium having processor-executable instructions that, when executed by a processor, performs a method comprising:

receiving a transmission which includes application signal information about a digital television (DTV) application (receiving television application and related information, [0032], lines 9 – 12, application being pre-coded with triggers, [0027]), wherein such information is based on metadata associated with the DTV application (application being pre-coded with triggers for displaying commercials, [0027], program information(metadata) containing options to display commercials, [0038], lines 1 - 4);

presenting a user interface (UI) configured to inform a user about the DTV application, wherein contents of the UI are based upon the received application signal information (loading and displaying the application on a television screen, [0025], lines 7 - 10).

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As per claim 10, Bokor teaches a medium as recited in claim 9, wherein the method further comprises receiving user input via the UI (transmission based on user request, [0025], lines 1 - 4).

As per claim 14, Bokor teaches a method for managing digital television (DTV) application signaling, the method comprising:

receiving a DTV application and its associated metadata (receiving television application and related information, [0032], lines 9 - 12);

constructing and formatting a DTV data service transmission which comprises the DTV application (orchestrating delivery of services, [0022], lines 6 - 16);

generating a data grouping having application signaling information, wherein the information is based upon the metadata associated with the DTV application (application being pre-coded with triggers, [0027], program information(metadata) containing options to display commercials, [0038], lines 1 - 4);

application-signaling a DTV receiving unit via a transmission comprising the data grouping (using triggers to tell STB when to insert commercials, [0027]).

As per claims 15, Bokor teaches a method as recited in claim 14, further comprising provisioning transmission bandwidth to transmit periodically the application signaling information built for the metadata (broadcaster sending triggers or signals, [0027], lines 10 -12).

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As per claim 16, Bokor teaches a method as recited in claim 14, wherein the metadata is part of an Extended Asset Definition Interface ([0032]).

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 5, 6, 7, 11, 12, 18, 19, 21, 23, 24 and 25 rejected under 35 U.S.C. 103(a) as being unpatentable over Bokor, publication number: US 2004.0015998 B1 in view of Eyal, patent number: US 6 484 199 B2.

As per claims 5, 6, 7, 11, 12, 18, 19, 21, 23, 24 and 25, Bokor teaches an interactive television application system that gives the user the ability to control preferences in terms of viewing commercials.

Bokor does not teach wherein the associated metadata comprises a data structure embodied on a processor-readable medium, the structure having fields comprising: an application identifier field for identifying the DTV application; an originator identifier field for identifying the originator of the DTV application; an application-type field for indicating a type of the DTV application; and a rating field for indicating a rating of the DTV application.



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In an analogous art, Eyal teaches the associated metadata comprises a data structure embodied on a processor-readable medium, the structure having fields comprising: an application identifier field for identifying the DTV application (identification, col. 12, line 46); an originator identifier field for identifying the originator of the DTV application (source, col. 12, lines 47); an application-type field for indicating a type of the DTV application (genre type, col. 12, line 50); and a rating field for indicating a rating of the DTV application (rating col. 12, lines 48).

Therefore, it would have been obvious to one of ordinary skill in the art to modify Bokor's interactive application system by include more information such as the source, rating and application identifier as described in Eyal's media search and playback for the advantages of selecting applications that better fit user preferences.

7. Claims 8, 13 and 26 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bokor, publication number: US 2004.0015998 B1 in view of Eyal, patent number: US 6 484 199 B2 in view of Barrus, publication number: US 20050022122 A1 in further view of MacInnis, publication number: US 2003/0028899 A1.

As per claims 8, 13 and 26, Bokor teaches an interactive television application system that gives the user the ability to control preferences in terms of viewing commercials. Bokor does not teach wherein the associated metadata comprises a data structure embodied on a processor-readable medium, the structure having fields comprising:

an application identifier field for identifying the DTV application; an originator identifier field for identifying the originator of the DTV application; an application-type field for indicating a type of the DTV application; a profile field for indicating a minimum profile of a system on which the DTV application will execute; a permission field denoting "sandbox" security permission of the DTV application; and a rating field for indicating a rating of the DTV application.

In an analogous art, Eyal teaches the associated metadata comprises a data structure embodied on a processor-readable medium, the structure having fields comprising: an application identifier field for identifying the DTV application (identification, col. 12, line 46); an originator identifier field for identifying the originator of the DTV application (source, col. 12, lines 47); an application-type field for indicating a type of the DTV application (genre type, col. 12, line 50); and a rating field for indicating a rating of the DTV application (rating col. 12, lines 48).

Therefore, it would have been obvious to one of ordinary skill in the art to modify Bokor's interactive application system by include more information such as the source, rating and application identifier as described in Eyal's media search and playback for the advantages of selecting applications that better fit user preferences.

The combination of Bokor and Eyal do not teach a permission field denoting "sandbox" security permission of the DTV application.

Barrus teaches the metadata having fields that specify permissions (metada having permissions, [0122], lines 14 - 16).

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Therefore, it would have been obvious to one of ordinary skill in the art to modify the combination of Bokor and Eyal by including permissions in the metadata as described by Barrus' system for the advantages of controlling changes and who can make them to systems.

The combination of Bokor, Eyal and Barrus don't teach a profile filed for indicating a minimum profile of a system on which the DTV application will execute.

In an analogous art, MacInnis teaches indicating a minimum profile of a system on which an application will execute (system requirement, [0033]).

Therefore it would have been obvious to one of ordinary skill in the art to modify the combination of Bokor, Eyal and Barrus by including a field for system requirements as described in MacInnis' system for the advantages of sending the application to only systems it will function on.

### ***Conclusion***


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Olugbenga O. Idowu whose telephone number is 571 270 1450. The examiner can normally be reached on Monday to Friday, 7am -5pm Est.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christopher Grant can be reached on 571 272 7294. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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